

Appl. No.: 09/924,348
Art Unit: 1732; Docket No.: B01-27
Reply to Final Office Action of April 8, 2004

REMARKS

Claims 1-8, 16, and 17 appear in this application for the Examiner's review and consideration. Claim 1 has been amended to recite the subject matter of claims 9-11, which are cancelled herein. Claim 16 has been amended to recite the 'closed' claim language "*consists of*" with respect to the second solid particulate medium. No new matter was added by these amendments.

Rejection Over Bissonnette In View of Shichman

Claims 1-8 were rejected under 35 U.S.C. § 103(a) as being obvious over the '357 patent to Bissonnette *et al.* in view of the '055 patent to Shichman *et al.*

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify the reference or combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, not in Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 493, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Bissonnette is generally directed to methods for making golf balls using rigid uncrosslinked *mantles or shells*, surrounding a solid center, to form a multi-layer "core." The thick (0.1-0.6 inches) *mantles/shells* include a reinforcing polymer component that imparts geometric stability to the uncrosslinked *mantle* material by inhibit shifting of the *mantle* during assembly about the center (See column 5, lines 45-57). Bissonnette's *mantles/shells* are not equivalent to the cores of the present invention.

The claims of the present invention, on the contrary, are directed to compression molding a core (*i.e.*, like Bissonnette's center, *not* the mantle) in a mold cavity to form a partially-cured core – it is clear from reading the Specification that a "core" of the present invention does not include intermediate layers, no matter what moniker (*e.g.*, mantle, outer core layer, inner cover layer, etc.) is assigned to them. As such, Bissonnette fails to disclose, or even suggest, partially curing the golf ball core of the present invention, let alone placing the partially-cured core in a second medium of solid particles having a particle size of 40 μ m to 0.1 inches and an average specific heat value in the range from 0.010 BTU/lb-°F to 1.00 BTU/lb-°F.

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Shichman does not cure the deficiencies of Bissonnette. Shichman is generally directed to a "free-curing" rubber composition obtained by adding a fiber-forming, semi-crystalline, thermoplastic resin to a rubber composition. The rubber and resin blend is carefully heated to a temperature above the melting point of the resin to insure homogeneous dispersion of the resin, is cooled, then is formed into a shaped article prior to "free curing." If the article is slightly pre-cured, the heating of the mixture of rubber, resin, and curing agent (added after blending) *must be below the melting point of the resin* (See column 7, lines 61-66).

As such, Shichman fails to disclose a golf ball or curing, partially or otherwise, materials for use in a golf ball. Shichman also fails to disclose compression molding the core material in a mold cavity at a first predetermined temperature and time such that the core material becomes a partially-cured core; placing the partially-cured core in a medium at a second predetermined temperature and time to form a substantially-cured core; and that the second medium is solid particles having a particle size of 40 μm to 0.1 inches and an average specific heat value in the range from 0.010 BTU/lb-°F to 1.00 BTU/lb-°F.

Shichman suggests curing by a number of conventional methods: mold curing, injection curing, steam curing, hydraulic curing, and even air curing. Shichman additionally sets forth that the stock can either be heated and/or partially cured in air and completed in the mold or partially cured in the mold and free cured in air. Despite all these potential cure mechanisms and timing, there remains no mention or suggestion, whatsoever, of a second cure by a solid particulate medium.

Neither reference, alone nor in combination, discloses the element of partially curing a core in a compression mold and then substantially curing the core in a medium. At best, Bissonnette, when combined with Shichman, suggest that semi-ellipsoidal half-shells formed of a thermoplastic/rubber blend can be injected over a center to form a core and then the core can be free cured in a manner other than with a hot solid particulate medium. This is not what is claimed in the present invention.

Regarding the specifically claimed temperatures, it is noted that the Examiner states that these are well-know and important. However, Shichman teaches curing in hot air at 310°F (See column 25, line 16) and claim 7 specifically claims between 350°F and 500°F, which is above the melting point of the polypropylene suggested Shichman. Thus, Shichman *teaches away* from the Examiner's conclusion.

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Thus, the rejection under 35 U.S.C. § 103(a) is believed to have been overcome for at least the above reasons. Applicant respectfully requests reconsideration and withdrawal thereof.

Rejections Over Bissonnette In View of Shichman and Watson

Claims 9-11 and 16-17 were separately rejected under 35 U.S.C. § 103(a) as being obvious over Bissonnette in view of Shichman and Watson. Watson is generally directed to vulcanizing rubber by bringing a rubber mixture into contact with a heated bed of finely-divided solid material which is continuously agitated and made mobile by a stream of gas (a fluidized bed).

Watson does not cure the deficiencies of the other references and certainly should not be combined with Bissonnette and/or Shichman. Watson teaches an improved method of vulcanizing rubber products of such a design that vulcanization in a mold is undesirable (See column 1, lines 27-46). More particularly, the patent teaches that "continuous vulcanization of extrusions may be carried out according to the invention in a horizontal trough containing a heated fluidized bed" (See column 3, lines 19-21). Thus, one of ordinary skill in the art would not read Watson as suggesting that golf ball cores could be partially cured in a compression mold and then substantially cured in solid particulate medium.

In forming the rejection, the Examiner has combined one golf ball reference with two very distinct rubber composition curing references. Clearly, the rubber composition curing references are non-analogous art (*i.e.*, they relate solely to a distinct part of Applicant's invention that the Examiner has been unsuccessful in finding in the golf ball art) and, surprisingly, the Examiner has not provided Applicant any reason, other than by using Applicant's claims as a template, why they can be combined with a golf ball reference.

Further, on pages 3-4 of the Final Office Action, the Examiner attempts to base the rejection on the conclusory statements that it would be obvious to combine the references because they are analogous with respect to partially curing a golf ball product and then substantially curing the golf ball product" and that first and second curing temperatures, times, and differences, are "generally well-known in the molding art" and "would have been obvious to one of ordinary skill in the art." Without factual findings in the references, support of sound technical reasoning, or justification on the level of the skilled artisan, the Examiner is attempting to rely the obviousness rejection on a conclusory statement that is born out of impermissible

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hindsight based on the disclosure of the present invention. By taking the Applicant's disclosure as a blueprint, extracting unrelated elements of separate disclosures out of their context, and simply piecing them together without evidence of such a suggestion, teaching, or motivation, the Examiner clearly presents a hindsight-based obviousness analysis, and inadvertently substantiates the patentability of the claim in question. "It is error to reconstruct the patentee's claimed invention from the prior art by using the patentee's claim as a 'blueprint.'" *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 277 USPQ 543 (Fed. Cir. 1985). Therefore, a *prima facie* case of obviousness has not been established.

Moreover, the Examiner has already acknowledged, in the previous Office Action, that a fluidized medium, whether liquid-based or air-based, is patentably distinct from the present invention.

Thus, for at least the above reasons, the rejections under 35 U.S.C. § 103(a) are believed to have been overcome. Applicant respectfully requests reconsideration and withdrawal thereof.



CONCLUSION

Based on the remarks set forth above, Applicant believes that all of the rejections have been overcome and the claims of the subject application are in condition for allowance. Should the Examiner have any further concerns or believe that a discussion with the Applicant's attorney would further the prosecution of this application, the Examiner is encouraged to call the attorney at the number below.

No fee is believed to be due for this submission. However, should any other required fees be due, please charge them to Acushnet Company Deposit Account No. 502309.

Date: June 8, 2004

Respectfully submitted,

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